

CLAIMS

1. A method of testing, comprising:

disposing a first film of a first contact material on a substrate;

disposing a second film of a second contact material on a rounded piece;

performing a measurement of a contact resistance value between the first film and the second film while the first film and the second film contact with a first controlled force;

running a current through a contact interface between the first film and the second film while the first film and the second film contact with a second controlled force; and

after running the current, performing a measurement of a stiction force value between the first film and the second film.

2. The method according to claim 1 further comprising the step of employing the contact resistance value and the stiction force value to determine whether a combination of a first material used for one of the thin films and a second material used for another of the pair of thin films will be useable for an application of interest.

3. The method according to claim 2 wherein the step of employing determines whether the combination will be useable as contact materials for a microswitch.

4. The method according to claim 1 wherein the step of disposing the second film disposes the second film on the rounded piece wherein a radius of curvature of the rounded piece along a contact surface between the first film and the second film is higher than 10 μm and lower than 100 μm .

5. The method according to claim 1 wherein the step of performing the measurement of the contact resistance value uses the first controlled force that does not exceed 100 μN .

6. The method according to claim 1 wherein the step of running the current uses the second controlled force that does not exceed 1 mN.

7. The method according to claim 1 wherein the step of disposing the first film of the first contact material disposes the first film of the first contact material on a planar substrate.